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INTERNATIONAL BULLETIN OF PLANT PROTECTION

1937 No. 10

DISCOVERIES AND CURRENT EVENTS *

Eritrea: Locusts †

During the month of July, 1937, no locusts were observed in any part of the Colony.

Greece: *Euxoa crassa* Injurious to the Grape-Vine §

On 26 March, 1937, the Prefect of Messenia and the Agricultural Syndicates of the Gargaliani district in western Peloponnese informed the Ministry of Agriculture that a caterpillar as yet unknown was causing considerable damage to the vineyards of the region. The Agricultural Bank of Greece also notified the Ministry of the appearance of the same parasite at Dialiscari.

The Ministry of Agriculture commissioned the Director of the Patras Phytopathological Station to visit the infested areas in order to study the question and to advise on the control measures to be adopted.

According to the report of this Director, the caterpillar coming out in large numbers during the night, causes considerable damage in the Marathos district. It was not possible to apply lead arsenate, for want of sprayers with agitators. On the other hand, the collecting of the caterpillars during the night gave excellent results.

Some samples of this moth were forwarded to the Benaki Phytopathological Institute, where the species was identified as *Euxoa crassa*, Treits.

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from the Government of Eritrea to the International Institute of Agriculture.

§ Communication from the official correspondent of the Institute, Professor Dr. C. A. Isaakidès, Director of the Benaki Phytopathological Institute, Kiphissia-Athens, Greece.

Mozambique: Locust Movements (*Nomadacris septemfasciata* and *Locusta migratoria migratorioides*) *

During the month of May, 1937, the appearance of larvae, which were destroyed, only occured in the circumscription of Lúrio, Porto Amelia District, Nyassa Province.

The swarms mostly attacked scattered areas in the districts of Porto Amelia and Mozambique, Nyassa Province, Tete, Zambezia Province, and Lourenço Marques, Sul do Save Province, but chiefly in the eastern part of the circumscription of Mutarara, Zambezia Province and the south-west area of the circumscription of Barué, in the Tete District.

Some damage was caused to the native crops in the administrative area of Balama, Montepuez circumscription, in the Porto Amelia District, also in the circumscriptions of Erati and Nicala, Mozambique District and in the circumscription of Barué, Tete District.

During the month of June, 1937, the appearance and movement of various swarms were observed in the provinces of Niassa, Zambezia and Sul do Save; on 30 May, in Zambezia, thirteen swarms of *Nomadacris septemfasciata* were reported in the circumscription of Barué, Tete District.

The position regarding locust movements in the month of June in comparison with the month of May, represents the following characteristics:—

(1) The situation in the provinces of Nyassa and Zambezia has improved in consequence of the displacement of several swarms towards the territories of Tanganyika and Nyasaland, and also because swarms have ceased to enter the country coming from the two Rhodesias.

(2) In the province of Sul do Save the displacement of swarms towards the north-east of the district of Lourenço Marques to that of Inhambane.

(3) In general, a tendency to the formation of large swarms is observed.

Damage, in general of a serious nature, has been caused to native crops in the circumscriptions of Mucojo (Porto Amélia district), Metarica (Mozambique district), Barué (Tete district) and Homoíne (Inhambane district). In the circumscription of Barué, fruit trees have also been damaged.

Palestine: Observations on the Life History of *Chrysomphalus ficus* †

Recent studies in the life history of *Chrysomphalus ficus* in the northern (Acre) area of Palestine have shown that there are two periods in its life history at which it is most susceptible to attack, namely in the early summer and late summer or early autumn.

At this period all insects are either in the larval or preoviposition stage and consequently they are more easily killed by fumigation.

* Communication from Mr. ALBERTO COUTINHO SARAIVA, Chief of the Section of Entomology, Lourenço Marques, transmitted by the 'Repartição Técnica de Agricultura' of the Mozambique Colony.

† Communication from the official correspondent of the Institute, Mr. E. BALLARD, Government Entomologist, Department of Agriculture and Fisheries, Jerusalem, Palestine.

It has been suggested, (and experiments are in progress to test the value of this suggestion) that if fumigation is given during these two periods during the course of one year that so large a kill will be obtained that further fumigation can be postponed for three or even four years.

The Netherlands: Outbreak of the Colorado Beetle (*Leptinotarsa decemlineata*) in the Country *

In 1937, foci of the Colorado potato beetle were found in the Province of Limburg. These foci only covered an area of a few square metres. One situated at Castenray, was discovered on 6 July; the other at Baarlo, on 11 August.

In the first case, there were 70 larvae, and in the second, 70 adults.

The foci were immediately treated by the system which was established in consequence of the International Conferences on the Colorado beetle, held at Brussels and Berlin. The potato fields were treated with lead arsenate sprays for a wide radius around these foci.

The control of the Colorado beetle in the Netherlands is regulated by Law of 27 December, 1934.

Southern Rhodesia: Locust Invasion, 1932-1937 †

Monthly Report No. 56. July, 1937.

During the month of July, 1937 the only districts in which swarms of locusts have been reported, are Salisbury, Marandellas, Lomagundi and Mazoe. The reports refer to the Red Locust (*Nomadacris septemfasciata*, Serv.). No damage has been reported.

Italian Somaliland: Some Recent Notes §

Among the observations made during the months of June and July, 1937, the following date are of particular interest:—

Frequent attacks and occasionally serious, of nematodes (*Anguillulina*, *Tylenchus*) on the banana, causing rotting of the roots and the consequent fall of the plants.

Empoasca facialis occurred in June to a considerable extent on cotton; the number of plants infested diminished considerably in July, and since then has caused little anxiety.

* Communication from the State Phytopathological Service, Wageningen, official correspondent of the Institute.

† Communication from the official correspondent of the Institute, Mr. RUPERT W. JACK, F. E. S. Chief Entomologist, Department of Agriculture, Salisbury, Southern Rhodesia.

§ Communication from Dr. FERRANTE PÀVERI-FONTANA, Chief of the Agricultural Bureau, Government of Italian Somaliland, Mogadiscio.

Mometa zemiodes caused some considerable damage in June, though only in isolated cases, by boring the stem of cotton plants.

The attacks of *Sesamia cretica* on maize, slight and infrequent in June, became serious in July, although not increasing in extent.

In July, some very serious cases of yellowing of groundnut plants were reported.

Cercospora personata, which attacked the leaves of the groundnut fairly seriously in June, literally invaded the plants in July, thus causing considerable damage.

In June, *Antigastra catalaunalis* attacked the inflorescences of sesame fairly seriously.

Switzerland: The Colorado Beetle (*Leptinotarsa decemlineata*) in German Switzerland *

In consequence of the wide spread of the Colorado beetle ascertained in French Switzerland (see this *Bulletin*, 1937, No. 9, pp. 200-201), it was to be expected that this pest would also soon make its appearance in German Switzerland.

The regions more especially exposed to the danger of invasion were systematically scouted by pupils of primary schools. In this way, during the month of August, 1937 this beetle was found in a commune of the Basel-Land canton. Its presence was also verified in a commune of the Solothurn canton. In both cases, it was a question of one adult only.

Control measures were organized in a uniform manner according to the method followed in French Switzerland. In the cantonal and communal centres, under the direction of the Federal Agricultural Experiment Station, Zürich-Oerlikon, the two foci were destroyed by means of carbon disulphide, and for a considerable area around these foci, potato crops were sprayed with lead arsenate.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

French West Africa (Sudan). — By Decree of the Governor General, dated 7 July, 1937, passed by the Permanent Commission of the Government Council, the Decree No. 2628 of 13 November, 1936, of the Lieutenant Governor of Sudan, rendering compulsory the declaration of the 'rosette' disease of the groundnut, is approved. (*Journal officiel de l'Afrique occidentale française*, Gorée, 17 juillet 1937, 33e année, nº 1731, p. 778).

Germany. — The third Decree of 20 July, 1937, relative to the prevention of the introduction of the Colorado beetle (*Leptinotarsa decemlineata*) specifies the dispositions regulating the importation of plants and parts of plants proceeding from France, and these dispositions are also applied to consignments from

* Communication from the official correspondent of the Institute, Dr. E. NEUWEILER, Federal Agricultural Experiment Station, Zürich-Oerlikon, Switzerland.

Belgium and Luxemburg, these two countries being considered infested by the Colorado beetle.

The Decree prohibits the importation and transit of potatoes, tomatoes, egg plants, plants with roots with or without adhering earth, tubers, bulbs, rhizomes and any other subterranean part of plants, as well as parings or other waste products of same, sacks or any other article employed in the packing or storage of these products.

During the period of 1 April to 14 November of each year, the importation and transit of fresh vegetables and other pot-herbs as well as the green parts of vegetables, with the exception of fruits, from France, Belgium and Luxemburg are authorized on the condition that these products have been grown at a distance of at least 50 km. from the outside limit of the area infested by the Colorado beetle and that each consignment is accompanied by a regular certificate conformably to that authorized by the Decree of 23 February, 1932 [see this *Bulletin*, 1932, No. 4, pp. 56-57].

It is understood that the importation and transit of live Colorado beetles in any stage of development are prohibited [see this *Bulletin*, 1932, No. 12, p. 205].

The Minister of Agriculture is authorized to concede derogations to this Decree. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang August 1937, 17. Jahrg., Nr. 8, S. 67).

*** By Decree of 29 July, 1937, the Minister of Agriculture, by derogation to the Decree of 20 July, 1937, has authorized the importation from France, Belgium and Luxemburg, of certain plants, with or without adhering earth, of which a list is given.

Consignments must be accompanied by a certificate issued by the Plant Protection Service of the country of origin, stating the botanical name and testifying the sanitary condition of the plants. The consignments will also be inspected on arrival by an officer of the German Plant Protection Service. (*Ibid.*).

Germany (**Saar**). — In order to prevent the possibility of the insecticides employed in the control of the Colorado beetle [*Leptinotarsa decemlineata*] becoming a danger to man, domestic animals and bees, a Police Ordinance, dated 7 August, 1937, establishes, for the district of Homburg, that potato fields, before the first treatment and subsequently until the end of harvesting, must be free from all weeds in flower.

Before proceeding to the treatment of potato fields adjoining meadows or fields under green forage crops, a protection zone 2 metres wide must be established on these latter and the grass must be mowed.

Plants having come into contact with insecticides shall not be utilized as a forage or as stable litter. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. September 1937, Bd. IX, Nr. 6, S. 124-125).

Argentine Republic. — By Decree No. 102.213 of 24 March, 1937, the regulations are established for the application of article 34, par. (*a*) of the Law No. 12.345, which exempts from customs duty, white arsenic, calcium arsenate,

sodium arsenate, sulphur, commercial carbolic acids, and nicotine sulphate, which are utilized in the preparation of remedies used in the control of pests and diseases. (*Boletín Oficial de la República Argentina*, Buenos Aires, 7 de julio de 1937, año XLV, núm. 12.894, pág. 8405).

*** By Decree No. 102.311 of 31 March, 1937, the price for spare parts for flame-thrower apparatus is established. (*Ibid.*, pág. 8402).

*** By Decree No. 102.863 of 6 April, 1937, the transport of non-disinfected cotton seed from the zone declared infected by the pink bollworm (*Platyedra gossypiella*) solely by river route and despatched to the Federal Capital, Rosario and San Lorenzo (Puerto Granaderos), for utilization in the factories established in the respective port zones or localities nominated is authorized up to 30 September, 1937. (*Ibid.*, págs. 8405 y 8406).

*** By Decree No. 104.424 of 27 April, 1937, it is established that the custom-house of the province of Mendoza shall control the entry of bananas from Ecuador via Chile.

The 'Dirección de Sanidad Vegetal' will adopt the necessary means to verify the sanitary condition of the fruit to be imported. (*Ibid.*, 29 de julio de 1937, núm. 12.912, pág. 9178).

Egypt * — By Decree of 19 June, 1937, the Decree of 1 February, 1933, declaring the San José scale (*Aspidiotus perniciosus*) harmful to fruits has been repealed.

At the same time, Article 2 of the Decree of 30 August, 1932 [see this *Bulletin*, 1933, No. 2, p. 32] prohibiting the introduction of certain fruits and plants without the authorization of the Ministry of Agriculture has been modified.

The following additions have been made to paragraph (1) of Article 2 of Law No. 1 of 4 January, 1916:—

(*a*) Plants and parts of plants and the fruits of the families *Rosaceae*, *Vitaceae*, *Papilionaceae*, *Cupuliferae*, *Salicineae*, *Tiliaceae*, *Rutaceae*, *Solanaceae*, *Juglandaceae*, *Moraceae*, *Coniferae*.

(*b*) Persimmon fruits.

(*c*) Onions.

(*d*) All plants set in pots or in earth or sand.

The following paragraph is added to the aforesaid Decree of 30 August, 1932:—

'The insect *Aspidiotus perniciosus*, Comst. is declared harmful to fruits and plants'.

'The introduction into Egyptian territory of all fruits, plants and parts of plants attacked by the said insect is prohibited'.

Estonia. — By Dispatch No. 901739/c of 27 August, 1937, the Royal Ministry of Foreign Affairs in Italy has communicated to the International Institute of Agriculture that the Estonian Legation at Rome by Verbal Note

* Communication from the Egyptian Legation at Rome.

No. 413 of 17 August, 1937, notified the said Ministry that the Estonian administrative centre for Plant Protection Service – provided for by the International Convention for Plant Protection, signed at Rome on 16 April, 1929 [see this *Bulletin*, 1929, No. 4, pp. 50-55] – is the Bureau for plant protection and seed control at the Ministry of Agriculture of Estonia (' Taimekaitse ja Seemnekontrolli amet Põllutööministeeriumi juures ').

This Bureau was established by Decree of 3 June, 1937, published in the *Riigi Teataja*, No. 47, 1937, Article 430.

The adhesion of the Estonian Government to the above-mentioned Convention was notified on 5 August, 1936 to the Italian Ministry of Foreign Affairs [see this *Bulletin*, 1936, No. 9, p. 200].

France. — By Ministerial Decree of 7 July, 1937, Article 2 of the Ministerial Decree of 15 March, 1932 [see this *Bulletin*, 1932, No. 4, p. 58] relative to the import of citrus fruits is abolished. (*Journal officiel de la République française*, Paris, 18 juillet 1937, LXIX^e année, n° 165, p. 8127).

*** The technical Regulation of the control of the sanitary inspection of potato crops intended for sowing, taken in conformity with the Article 8 of the Ministerial Decree of 13 April, 1934 [see this *Bulletin*, 1934, No. 6, p. 129], and approved by the Minister of Agriculture on 10 July, 1937, establishes the dispositions relative to the applications for admission to official control, the registering of the crops admitted to control, the organization of control methods, the valuation of the harvests, labels and guarantee seal and the control costs.

This Regulation is followed by technical instructions for control and also two appendices (Appendix I: Example of the application form required for official control; Appendix II: Notation list). (*Ibid.*, 15 août 1937, n° 189, p. 9251-9253).

*** A Law of 24 July, 1937, contains the dispositions relative to the indemnification of the damages caused to the crops by game. (Ministère de l'Agriculture. Direction de l'Agriculture. *Bulletin de l'Office de Renseignements agricoles*, Paris, 1^er août 1937, année 1937, n° 15, p. 314-315).

*** By Decree of 15 August, 1937, the customs house of Limoges is added to the list of offices designated in Article 1 of the Decree of 28 August, 1882, establishing the regulations regarding the introduction into France of plants and the various products of nurseries, gardens, green-houses and orangeries. (*Journal officiel de la République française*, 29 août 1937, n° 200, p. 9986).

Italy. — The Ministerial Decree of 9 July, 1937, establishing the cynegetic calendar for the year 1937, also confirms the absolute interdiction of shooting and capturing, during the year 1937-1938, the following birds: —green woodpecker [*Gecinus viridis*], spotted woodpeckers [*Dendrocopus major*, *Dendr. medius* and *Dendr. minor*], black woodpecker [*Dendr. martius*], tomtits [*Parus* and *Aegithalus* spp.], willow-warblers [*Phylloscopus* spp.], penduline titmouse [*Remizus*

pendulinus], golden crested wren [*Regulus regulus*], fire-crested wren [*Reg. ignicapillus*], wren [*Anorthura troglodytes*], common nightingale [*Aëdon luscinia*], and redbreast [*Erythacus rubecula*]. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 14 luglio 1937, anno 78º, n. 161, p. 2632).

*** By Decree of the Minister of Finance, dated 17 July, 1937, the application of the exchange duty at the reduced rate of 0.50 lire per cent., is extended from 15 August, 1937, to the following products:—

Lead arsenate in powder form, lead arsenate in paste form, calcium arsenate, sodium arsenate, ' Azol ', ' Diaspidolo ', ' Jemuro ', ' Lim ', ' Aphidus ', ' Risuro ', ' Crusbar ', ' Alarvis ', ' Entopex ', ' Controcuscuta ', colloidal arsenate of lead in paste and powder form, colloidal arsenate of calcium in powder, ' Basif ', and zinc phosphide. (*Ibid.*, 12 agosto 1937, n. 186, p. 3052).

*** A Ministerial Decree of 29 July, 1937 establishes the regulations to be followed, from a phytosanitary aspect, regarding the import from abroad of potatoes intended exclusively for planting purposes, for the 1937-1938 season. (*Ibid.*, 2 agosto 1937, n. 177, pp. 2900-2902).

*** By Ministerial Decree of 31 August, 1937, the territory of the commune of Pannarano, Province of Benevento, has been declared infested with grape phylloxera. (*Ibid.*, 10 settembre 1937, n. 211, p. 3406).

Morocco (French Zone). — By four Decrees of the Director of Economic Affairs, dated 5 July, 1937, an inquiry is opened in the circumscription of the civil control of Fès-banlieue relative to the projects regarding the organization of four syndical associations for the control of plant parasites, denominated respectively ' de Zouarha ', ' du Saïs ', ' de Mont-Fleuri ' and ' de Dar-Debibarh '.

Compulsory participation in these syndical associations is required of all occupiers of land in any capacity whatsoever, on whose grounds are plants which are susceptible to the attacks of the plant parasites enumerated in the Vizirial Decree of 17 March, 1936 [see this *Bulletin*, 1936, No. 8, p. 179]. (Empire chérifien. Protectorat de la République française au Maroc. *Bulletin officiel*, Rabat, 23 juillet 1937, XXVIe année, nº 1291, p. 1029-1030).

Dominican Republic. — Taking into consideration that in the neighbouring Republic of Haiti the cotton boll weevil (*Anthonomus grandis*) is to be found, and that the presence of the said insect has been verified in other countries of America, Decree No. 1899 of 1 June, 1937, prescribes, *inter alia*, the following dispositions:—

Art. 1. — A zone twenty five kilometres in width shall be established at the Dominican-Haitian frontier, in which all cultivation of cotton is absolutely prohibited.

Art. 2. — Commencing from the limits of this zone, another eight kilometres in extent, shall be established in which cotton may only be cultivated in sandy soils.

Art. 3. — Cotton-growing plantations at present existing in the zones referred to in the aforesaid articles, shall be subjected to a special control by the agricultural authorities, in order that they may be destroyed as soon as the presence of the cotton boll weevil is observed in the said plantations or the presence of any other pest which may constitute a danger to the cotton plantations of the Republic.

Art. 4. — The introduction into the country of cotton, parts of this plant, seeds, sacks, or packing cases used for same, coming from Haiti, Mexico, Guatemala, Costa Rica, U. S. A., and Cuba is absolutely prohibited.

Art. 5. — The luggage of travellers from the countries mentioned in the previous article shall be inspected externally, by the Inspectors of the Immigration Service at the maritime ports and the frontier customs-houses, for which they shall be instructed by the Ministry of Agriculture, while the said Ministry shall establish a special inspection Service.

Art. 6. — The Dominican Consuls of the countries mentioned in Art. 4 shall decline to visé all documents regarding the despach of all material stated in the said article, and the customs authorities, both maritime and frontier shall refuse all entry of the said material. (*Revista de Agricultura*, Órgano oficial de la Secretaría de Estado de Agricultura, Ciudad Trujillo, República Dominicana, junio de 1937, vol. XXVIII, núm. 93, pág. 281).

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[The Italian Government, through the intermediary of the 'R. Commissariato generale anticoccidico', has organized, during the last ten years, a systematic control of scale insects of citrus trees in Sicily and Calabria, by means of hydrocyanic acid gas fumigation carried out very extensively and effectively. The original American method has been considerably improved, consequently the publication of a instructive manual giving precise information regarding the technique to be followed in the fumigation of the afore-mentioned Italian regions, and in the various conditions that may occur, was found to be very necessary.

This manual comprises four chapters entitled as follows:—

I. — Le cocciniglie degli agrumi.
II. — La chimica delle fumigazioni cianidriche.
III. — La tecnica delle fumigazioni cianidriche degli agrumeti.
IV. — Prevenzione degli infortuni e soccorsi d'urgenza.

Scale insects harmful to citrus in Italy are: — *Chrysomphalus dictyospermi*, *Aspidiotus hederae*, *Lepidosaphes citricola*, *Parlatoria zizyphus*, *P. pergandei* var. *camelliae*, *Aonidiella aurantii*, *Saissetia oleae*, *Coccus hesperidum*, *Ceroplastes sinensis*, *Pseudococcus citri* and *Icerya purchasi*].

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[Free translation and rearrangement of the publication previously issued in French and English by the International Institute of Agriculture (see this *Bulletin*, 1937, No. 2, p. 40).— Titles and summaries of this work are also given in English, French and Spanish:— 'The bibliographies of agriculture. International summary of the current bibliographies and reports in the entire domain of agriculture and allied subjects. Compiled in the Library of the International Institute of Agriculture in Rome'. — 'Aperçu international des bibliographies courantes et des services de documentation analytique concernant l'ensemble de l'agriculture et des sciences connexes, d'après la documentation de la Bibliothèque de l'Institut international d'Agriculture de Rome'. — 'El material bibliográfico de la agricultura. Una síntesis internacional de las bibliografías y de los extractos, puestos al día, en todo el dominio de la agricultura y esferas afines. Recogida en la Biblioteca del Instituto Internacional de Agricultura de Roma'].

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NOTES

VIIth International Entomological Congress. — This Congress will be held at Berlin from 15 to 20 August, 1938.

One of the four sections reserved for applied entomology will be devoted to forest entomology, and another to agricultural entomology (grape-vine and fruit trees, field crops and vegetable plants, insects harmful to stored products, insecticides).

All correspondence should be addressed to the Secretary General of the Congress, Prof. Dr. Hering, Zoological Museum of the University, Invalidenstrasse 43, Berlin, N 4.

IXth International Ornithological Congress. — This Congress will be held at Rouen, France from 9 to 13 May, 1938.

In conformity with the wish expressed by the International Ornithological Committee, it is proposed that questions regarding the protection of birds shall be discussed during the course of the meetings of the International Committee for Bird Protection which will take place at Rouen immediately previous to the opening of the Congress on 6 and 7 May, 1938. The resolutions adopted and proposed will be presented for approval to the Congress at the time of the general concluding meeting.

All correspondence relative to the Congress should be addressed to the Secretary, Mr. Jean Delacour, Château de Clères, Seine-Inférieure, France.

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